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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,703	09/25/2003	Cheol-Ju Yang	45590	6361

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EXAMINER

MORRISON, THOMAS A

ART UNIT PAPER NUMBER

3653

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,703

Applicant(s)

YANG ET AL.

Examiner

Thomas A. Morrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's arguments with regard to the restriction requirement in the prior Office Action dated March 30, 2005 have been considered and the restriction requirement has rescinded. As such, claims 1-12 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the paper" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the time" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the printing operation" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the paper" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the time" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the pickup unit" in lines 5-6. There is insufficient antecedent basis for this limitation in the claim.

Also, claim 1 recites "a paper pickup operation", and then lines 7-8 of claim 4 recite "a paper pickup operation". It is unclear if the recited "a paper pickup operation" in claim 4 is same or different from the previously recited "a paper pickup operation" in claim 1.

Regarding claim 5, this claim recites "the step of performing a paper pickup operation". However, claims 4 and 1 both recite "a paper pickup operation". As such, it is unclear which paper pickup operation is referred to in claim 5.

Claim 6 recites the limitation "the system" in line 3 and line 6. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 7, claim 6 recites "a paper pickup operation", and then lines 3-4 of claim 7 recite "a paper pickup operation". It is unclear if the recited "a paper pickup operation" in claim 7 is same or different from the previously recited "a paper pickup operation" in claim 6.

Claim 7 recites the limitation "the paper" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the time" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "the pickup unit" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Also, claim 7 recites "a paper pickup operation" in line 8. However, claims 7 and 6 both recite "a paper pickup operation". As such, it is unclear which paper pickup operation is referred to in claim 7.

Claim 8 recites the limitation "the paper" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the time" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Moreover, there is insufficient structural relationship recited in claim 8 and its dependent claims 9-11, between the recited elements (e.g., the controller, the paper feeding sensor and the pickup unit) to understand how the recited function is performed. What structure or structural relationship allows the paper pickup operation to be performed as claimed?

Regarding claim 9, there is insufficient structural relationship recited in claim 9, between the recited elements (e.g., the pickup controller and the transfer belt), to understand how the recited function is performed. What structure or structural relationship allows the controller to determine that a paper jam occurs? What structure determines a pickup error?

Regarding claim 10, there is insufficient structural relationship recited in claim 10, between the recited elements (e.g., the transfer roller, the transfer belt, the pickup unit, and the transfer roller), to understand how the recited functions are performed. What structure or structural relationship allows the recited time periods to be determined? What structure causes the transfer roller to contact the transfer belt?

What drives the pickup unit? What structure detects the front end of the paper in the transfer roller? What structure performs the printing operation?

Regarding claim 11, there is insufficient structural relationship recited in claim 11, between the recited elements (e.g., the transfer belt, the developing agent and the ink cartridges), to understand how the recited functions are performed. What structure or structural relationship allows the recited time periods to be determined? What structure causes the a color toner image to be transfers to the transfer belt? What operates the transfer belt? What structure performs the printing operation?

Regarding claim 12, there is insufficient structural relationship recited in claim 12, between the recited elements (e.g., the controller, the transfer belt, the pickup unit, and the paper feeding sensor), to understand how the recited functions are performed. What structural relationship between the controller and the pickup unit allows the paper pickup operation to be performed repeatedly? What structure or structural relationship allows the recited time to be determined? What is the structural relationship between the paper feeding sensor and the controller? What structural relationship between the pickup roller and the other elements allows the no-load operation of the transfer belt and the paper pickup operation to be performed repeatedly? What structure or structural relationship determines that the paper pickup in not successfully performed? What structure or structural relationship allows a paper jam to be determined?

Also, with regard to claim 12, MPEP, section 2173.05(p) states, "A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph." *Id.* Independent claim 12 recites

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"An image forming system comprising a controller", and then recites method operations that the controller performs. Since claim 12 claims both an apparatus and the method steps of using the apparatus, this claim is indefinite.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claim 12 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In particular, claim 12 is directed to neither a "process" nor a "machine," but rather embraces or overlaps two different statutory classes of invention set forth in 35 U.S.C. 101 which is drafted so as to set forth the statutory classes of invention in the alternative only. See, MPEP, section 2173.05(p). Specifically, claim 12 recites both a process and a machine.

Allowable Subject Matter

4. Claim 1 is allowed.

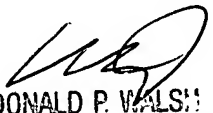
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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